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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,771	12/12/2003	Ramakrishnan Rajamony	AUS920030887US1	1762
45502	7590	08/15/2007	EXAMINER	
DILLON & YUDELL LLP 8911 N. CAPITAL OF TEXAS HWY., SUITE 2110 AUSTIN, TX 78759			NOORISTANY, SULAIMAN	
		ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

80

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/734,771	RAJAMONY, RAMAKRISHNAN
	Examiner Sulaiman Nooristany	Art Unit 2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date: _____	6) <input type="checkbox"/> Other: _____

***Detailed Action***

This Office Action is response to the application (10/734771) filed on 12 December 2003.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 10 & 17** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 10 & 17 recite "a service for estimating ..." which is directed at a software computer program per se. A computer program is non-statutory because it is not considered a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. Because the claim may be directed toward a program the claim as a whole is considered non-statutory.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1, 4, and 8** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Further, in line 6-7 of claim 1, applicant claimed "***delivering the snippet to the client responsive to the client accessing the server***" and in line 9-10 of claim 1, applicant claimed "***sending the first and second objects to the client responsive for request from the snippet***" which cannot be determined to which step this request is referred to.

In line 2 of claim 4, the applicant claimed "***a minimum transmission unit***" is not properly referenced & define as it is unknown what a minimum transmission unit is referring to.

In line 1-3 of claim 8, applicant claimed "***Request for the first object only after the request for the second object***" which cannot be determined to which step this request is referred to as go back to claim 1. However, claims will be given a broad reasonable interpretation for the purposes of examination as best understood.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

- (e) the invention was described in- 1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or 2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, *except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.*

**Claim 1** is rejected under 35 USC 102 (e) as being anticipated by **Patel**. US Patent No. 6,731,600.

**Regarding claim 1**, Patel teaches wherein a computer program product for estimating the bandwidth of a connection between a client and a server, the computer program product comprising a set of computer executable instructions stored on a computer readable medium (**The system includes a server computer and a client computer. The server computer is configured to transmit data packets comprising a data object from the server computer to the client computer (Abstract lines 1-5), The server computer is configured to maintain and store one or more data objects (Col. 5, lines 46-47), computer-readable format (Col. 6, line53)**), the medium comprising:

**a snippet for requesting the server to serve, consecutively, first and second objects to the client (receiving a first data packet and a second data packet from a server computer over a communication link to the server computer (Col. 2, lines 1-3), the first data packet and the second data packet are sent from the server computer back-to-back relative to each other (Col. 2, lines 34-36));**

**computer code means for delivering the snippet to the client responsive to the client accessing the server (the server computer sends in succession each of the packets to the client computer (Col. 1, lines 28-30));**

**computer code means for invoking the snippet to execute on the client (The packet receiver . . may each be written in any programming language. . . . C, C++, BASIC, Pascal, Java, and FORTRAN are industry standard programming**

**languages for which many commercial compilers can be used to create executable code (Col. 6, lines 26-33), Fig. 2, Client computer unit 112 & Packet Receiver unit 200);**

computer code means for sending the first and second objects to the client responsive to a request from the snippet (**the first data packet and the second data packet are sent from the server computer back-to-back relative to each other (Col. 2, lines 34-36)**); and

computer code means for determining the time interval between delivery of the first and second objects and for estimating the bandwidth therefrom (**receiving the first data packet in the client computer; (2) identifying a first point in time upon the completion of the receipt of the first data packet; (3) receiving the second data packet; (4) identifying a second point in time upon the completion of the receipt of the second data packet; (5) determining the difference between the first point in time and the second point in time; (6) determining a quantity of data in the second data packet; and (7) determining the transmission bandwidth based on the determined difference and the determined quantity Col. 2, lines 10-20**)).

**Regarding claim 9, Patel taught the computer program product of claim 1 [See above rejection]. Patel further teaches wherein comprising code means for invoking the snippet multiple times to obtain multiple estimates of the bandwidth and code means for selecting the highest obtained bandwidth as the estimated bandwidth (The transmission bandwidth detector uses identified back-to-back data packets to**

**determine the transmission bandwidth between the server computer and the client computer (Abstract, lines 10-13)).**

***Claim Rejections - 35 USC § 103***

**The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2-8, 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. U.S. Patent No. US 6,731,600 in view of Burman U.S. App. Patent No. US 2001/0010059.**

**Regarding claim 2, Patel teaches wherein the code means for requesting the first and second objects comprises code means for identifying the first and second objects (accessing at least one identifier in a first data packet, the identifier indicating that the first data packet and the second data packet are being sent back-to-back relative to each other (Col. 2, lines 6-9))**

With respect to claim 2, Patel teaches the invention set forth above except for the claimed "identifying the first and second objects with URL's that are unique on a network connecting the client and the server".

Burman teaches that it is well known to utilize "identifying the first and second objects with URL's that are unique on a network connecting the client and the server" (**a user can select which web page or hypertext document the user wishes to have displayed on the user's computer or terminal by specifying the web page's Universal or Uniform Resource Locator (URL) address. Each server has a unique URL address and, in fact, so does each web page and each file needed to display the web page [0008]**). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Patel's invention by having an identifier such as URL address, which is an Internet term. A URL is a fancy name for an internet address that can lead a user to a file on any computer connected to the internet or local TC/IP system (as taught by Burman).

**Regarding claim 3**, Patel taught wherein the code means for transmitting the first and second objects to the client [**See above rejection**]. Patel, however, is silent of the term (ISP), but he discloses the term "internet", which is inherent to a method by which users connect to the internet, usually through the service of an internet provider (**The data object, located on the server computer, is made available for further distribution over a network, such as the Internet, to one or more client computers (Col. 1, lines 19-22)**).

Burman further teaches wherein "comprise code means for transmitting the first and second objects to the client from a content distribution network server that is architecturally proximal to an ISP of the client" (**user who is connected to an ISP**

**(Internet Service Provider) who, in turn, is connected to another ISP (and possibly others) before the communications can travel at high speeds on a computer network, such as the "Internet backbone [0072]).**

**Regarding claim 4**, Patel and Burman together taught the computer program product of claim 3 [**See above rejection**].

Patel further teaches wherein “the second object has a size less than or equal to a minimum transmission unit associated with the network, wherein the second object is prevented from fragmentation”. (**the size of the second data packet is less than or equal to 500 bytes, the client computer 112 assigns the second correction (Col. 11, lines 47-49)**).

**Regarding claim 5**, Patel teaches wherein the snippet includes:  
code means for creating first and second image objects (**transmit and receive data objects, including video, text, graphic and other data, over a network (Col. 1, lines 13-15)**);  
code means for generating a unique identifier (uniqueID) (**accessing at least one identifier in a first data packet, the identifier indicating that the first data packet and the second data packet are being sent back-to-back relative to each other (Col. 2, lines 6-9)**); and

With respect to claim 5, Patel teaches the invention set forth above except for the

Art Unit: 2109

claimed "code means for associating the first and second image objects with the first and second objects on the server using URLs containing the uniqueID".

Burman teaches that it is well known to utilize "code means for associating the first and second image objects with the first and second objects on the server using URLs containing the uniqueID" (**a user can select which web page or hypertext document the user wishes to have displayed on the user's computer or terminal by specifying the web page's Universal or Uniform Resource Locator (URL) address. Each server has a unique URL address and, in fact, so does each web page and each file needed to display the web page [0008]**). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Patel's invention by having an identifier such as URL address, which is an Internet term. A URL is a fancy name for an internet address that can lead a user to a file on any computer connected to the internet or local TC/IP system (as taught by Burman).

**Regarding claim 6**, Patel and Burman together taught the computer program product of claim 5 [**see above rejection**]. Burman further discloses wherein "code means for ignoring, by the server, the uniqueID in the first and second URL's wherein requests for the first and second objects from any client are served from a single pair of objects on the server, regardless of the uniqueID in the URL's received by the server" (**a user can select which web page or hypertext document the user wishes to have displayed on the user's computer or terminal by specifying the web page's Universal or Uniform Resource Locator (URL) address. Each server has a unique URL address**

**and, in fact, so does each web page and each file needed to display the web page [0008]).**

**Regarding claim 7**, Patel and Burman together taught the computer program product of claim 5 [**see above rejection**]. Burman further discloses wherein the code means for generating the uniqueID (**Each server has a unique URL address [0008]**). Patel further teaches wherein “includes code means for deriving the identifier based on a time of day value and a random number” (**the timestamp indicates the system time, such as "12:05:56 a.m." (Col. 7, lines 17-18)**).

**Regarding claim 10**, Patel teaches a service for estimating the obtainable bandwidth of a client's network connection (**estimate the maximum transmission bandwidth for a network (Col. 1, lines 48-49)**),

responding to the request for bandwidth estimation by providing the client with a snippet for requesting the server to serve first and second objects, in a chronologically sequential manner, to the client (**the first data packet and the second data packet are sent from the server computer back-to-back relative to each other (Col. 2, lines 34-36)**);

the server, wherein the snippet returns information to the service provider indicative of the amount of time elapsing between delivery of the first and second objects (**the total packet time is the sum of the respective time intervals beginning upon receipt of the first data packet in each of the selected back-to-back packets**

**and ending upon receipt of the associated second data packet (Col. 2, lines 64-67);**

estimating the obtainable bandwidth based in part on the elapsed time  
**(bandwidth=a total packet size/(a total packet time+a correction factor (Col. 2, lines 58-59)).**

With respect to claim 10, Patel is silent of the term (Service Provider), but he discloses the term “internet”, which is inherent to a method by which users connect to the internet, usually through the service of an internet provider **(The data object, located on the server computer, is made available for further distribution over a network, such as the Internet, to one or more client computers (Col. 1, lines 19-22))**

Burman further teaches wherein “enabling a server to request from a service provider an estimation of the bandwidth of a connection between the server and the client” **(user who is connected to an ISP (Internet Service Provider) who, in turn, is connected to another ISP (and possibly others) before the communications can travel at high speeds on a computer network, such as the "Internet backbone [0072]).**

**Regarding claim 11, Patel and Burman taught the service of claim 10 [See above rejection]. Patel further discloses wherein “maintaining response time data for the server and alerting the server based the server response time for a selected client and the estimated bandwidth associated with the selected client” (The server computer is**

**configured to maintain and store one or more data objects (Col. 5, lines 46-47),  
accessing a timestamp in each of the one or more data packets, each timestamp  
approximately identifying a point in time when the server computer began  
transmitting the respective data packet (Col. 4, lines 26-29)).**

**Claim 12** has the similar limitation as of claim 2; therefore, it's rejected under the same rationale as in claim 2.

**Claim 13** has the similar limitation as of claim 3; therefore, it's rejected under the same rationale as in claim 3.

**Claim 14** has the similar limitation as of claim 4; therefore, it's rejected under the same rationale as in claim 4.

**Claim 15** has the similar limitation as of claim 9; therefore, it's rejected under the same rationale as in claim 9.

**Claim 16** has the similar limitation as of claim 5; therefore, it's rejected under the same rationale as in claim 5.

**Regarding claim 17**, Patel teaches wherein the server being configured to:  
provide a bandwidth estimation snippet to the client, the bandwidth estimation snippet

being configured to request the server to transmit, in chronologically adjacent transactions, first and second objects to the client (**receiving a first data packet and a second data packet from a server computer over a communication link to the server computer (Col. 2, lines 1-3)**, the first data packet and the second data packet are sent from the server computer back-to-back relative to each other (Col. 2, lines 34-36));

identify a request generated by the snippet as a request for bandwidth estimation objects (**the first data packet and the second data packet are sent from the server computer back-to-back relative to each other (Col. 2, lines 34-36)**, (receiving the first data packet in the client computer; (2) identifying a first point in time upon the completion of the receipt of the first data packet; (3) receiving the second data packet; (4) identifying a second point in time upon the completion of the receipt of the second data packet (Col. 2, lines 10-15)); and

receive information from the client indicative of the time elapsing between delivery of the first and second objects (**receiving the first data packet in the client computer; (2) identifying a first point in time upon the completion of the receipt of the first data packet; (3) receiving the second data packet; (4) identifying a second point in time upon the completion of the receipt of the second data packet; (5) determining the difference between the first point in time and the second point in time; (6) determining a quantity of data in the second data packet; and (7) determining the transmission bandwidth based on the determined difference and the determined quantity Col. 2, lines 10-20)).**

Art Unit: 2109

Patel, however, is silent of the term (ISP), but he discloses the term “internet”, which is inherent to a method by which users connect to the internet, usually through the service of an internet provider (**The data object, located on the server computer, is made available for further distribution over a network, such as the Internet, to one or more client computers (Col. 1, lines 19-22)**).

Burman further teaches wherein “a server in a data processing network connecting the server to a client through the client's ISP” (**user who is connected to an ISP (Internet Service Provider) who, in turn, is connected to another ISP (and possibly others) before the communications can travel at high speeds on a computer network, such as the "Internet backbone [0072]**).

**Claim 18** has the similar limitation as those claims 2 & 12; therefore, it's rejected under the same rationale as in claims 2 & 12.

**Claim 19** has the similar limitation as of claim 7; therefore, it's rejected under the same rationale as in claim 7.

**Claim 20** has the similar limitation as those claims 3 & 13; therefore, it's rejected under the same rationale as in claims 3 & 13.

Art Unit: 2109

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 7,130,268 to Mascolo, Saverio.

US Patent 6,965,573 to Mizukoshi, Yasuhiro.

US Patent App. 2005/0071876 to van Beek, Petrus J. L.

US Patent App. 2002/0169880 to Loguinov et al.

US Patent App. 2003/0037141 to Milo et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sulaiman Nooristany      08/07/2007

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